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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,732	01/21/2004	Gary Whitten	6900-01-1	3664

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EXAMINER
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RAYYAN, SUSAN F

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/761,732

Applicant(s)

WHITTEN ET AL.

Examiner

Susan F. Rayyan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-33 are pending.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 6,604,110 issued to William H. Savage et al ("Savage") and US Patent Number 7,065,541 issued to Adarsh Gupta et al ("Gupta").**

As per claim 1 Savage teaches:

a server connectable to a network, the server having a memory accessible thereto (col. 6, lines 38-40);

a source database accessible to the server having data stored therein, the source database having metadata associated therewith identifying a structure and at least one field of the source database (col.4, lines 55-60);

a client connectable to the network for communication with the server, the client having a memory accessible thereto for storing a copy of the source database (col.6, lines 38-50);

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the server accesses the source database and retrieves the metadata and at least a portion of the data and stores the retrieved data in at least one data object, each data object corresponding to a field of the database (col.4, lines 55-65); the server sends the metadata and the at least one data object to the client (col.3, lines 1-15).

Savage does not explicitly teach the client receives the metadata and the at least one data object from the server and generates and stores a copy of the database using the metadata, and populates the copy of the database with the data from the at least one data object and wherein the client-server system provides for the transfer of a source database to the client across various database types, vendors and operating systems without development effort. Gupta does teach the client receives the metadata and the at least one data object from the server and generates and stores a copy of the database using the metadata, and populates the copy of the database with the data from the at least one data object (col.6, lines 20-27) and wherein the client-server system provides for the transfer of a source database to the client across various database types, vendors and operating systems without development effort (col.4, lines 59-67 and col.6, lines 30-35) to provide continuous transaction services while migrating a database (col.3, lines 41-43). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Savage with the client receives the metadata and the at least one data object from the server and generates and stores a copy of the database using the metadata, and populates the copy of the database with the data from the at least one data object and wherein the client-server system provides

for the transfer of a source database to the client across various database types, vendors and operating systems without development effort to provide continuous transaction services while migrating a database (col.3, lines 41-43).

As per claim 2, same as claim arguments above and Savage teaches:  
wherein the server further comprises a data access application which includes an executable program for generating and executing queries to the database for retrieving the metadata and the data therefrom and storing the retrieved data in at least one data object, each data object corresponding to a field of the database (col.6, lines 15-17).

As per claim 3 same as claim arguments above and Savage teaches:  
wherein the metadata includes at least one of: a database identifier; a list of tables stored in the database; a list of columns for each table; and a data type for each column (col. 4, lines 55-60).

As per claim 4 same as claim arguments above and Gupta teaches:  
wherein the database is a relational database (col.6, lines 15-17).

As per claim 5 same as claim arguments above and Savage teaches:  
a database server coupled to the database (col. 3, lines 17-33, Figure 1).

As per claim 6 same as claim arguments above and Gupta teaches:  
wherein the data access application further comprises a programming interface for  
accessing the database (col. 3, lines 64-66).

As per claim 7 same as claim arguments above and Gupta teaches:  
wherein the programming interface is a Java DataBase Connectivity (JDBC) component  
(col.3, line 64 to col. 4, line 2).

As per claim 8 same as claim arguments above and Savage teaches:  
wherein the database server further comprises a Relational DataBase Management  
System (RDBMS) (col.5, lines 28-30).

As per claim 9 same as claim arguments above and Savage teaches:  
wherein the client further comprises a Relational DataBase Management System  
(RDBMS) (col.5, lines 28-30).

As per claim 10 same as claim arguments above and Gupta teaches:  
wherein the network is the Internet and the client is a Java applet executed on a Java  
enabled web-browser(col.3, line 64 to col. 4, line 2).

As per claim 11 same as claim arguments above and Gupta teaches:  
wherein the Java applet is downloadable from the server to the client(col.3, line 64 to  
col. 4, line 2).

As per claim 12 same as claim arguments above and Gupta teaches:  
wherein the database to be copied is identified in a request from the client using a  
Uniform Resource Locator (URL) (col.3, line 64 to col. 4, line 2).

As per claim 13 same as claim arguments above and Savage teaches:  
wherein the copy of the database is generated in response to the execution of a GUI  
function (Figure 1, Ref. No. 24).

As per claim 14 same as claim arguments above and Gupta teaches:  
wherein the server further comprises a web-server for communicating with the  
client(col.3, line 64 to col. 4, line 2).

As per claim 15 same as claim arguments above and Gupta teaches:  
wherein the data access application stores the metadata in a structure object and the  
structure object and the at least one data object in a database object and transfers the  
database object to the web-server for transfer thereof to the client (col.6, lines 20-27).

As per claim 16 same as claim arguments above and Gupta teaches:  
wherein the web-server serializes the database object prior to the transfer thereof to the  
client(col.3, line 64 to col. 4, line 2).

As per claim 17 same as claim arguments above and Savage teaches:  
wherein the server further comprises a request processing application for validating client access to a requested database or portion thereof (col. 6, lines 60-64).

As per claim 18 same as claim arguments above and Gupta teaches:  
wherein the web-server communicates with the client via Hypertext Transfer Protocol (HTTP) (col.3, line 64 to col. 4, line 2).

As per claim 19 same as claim arguments above and Savage teaches:  
further comprising an incremental transfer process for maintaining synchronization between the source database and the copy of the source database residing on the client system (col. 14, lines 9-16).

As per claim 20 same as claim arguments above and Gupta teaches:  
web based utility for client viewing and modifying database data in a source database, the utility operable across database types, vendors and operating systems(col.3, line 64-67).

As per claim 21 same as claim arguments above and Savage teaches:  
comprising a data verification process for verifying the integrity of the data objects transferred to the client over the network (col. 22, lines 10-12).



As per claim 22 Savage teaches:

retrieving from the database the metadata and at least a portion of the data stored therein (col.4, lines 55-65);

transferring the metadata and the at least one data object to the server for transfer thereof to the client (col. 3, lines 1-15);

Savage does not explicitly teach storing the retrieved data in at least one data object, each data object corresponding to a field of the database and wherein the data access application operates without further development across database types, vendors and operating systems. Gupta does teach storing the retrieved data in at least one data object, each data object corresponding to a field of the database (col. 6, lines 20-27) and wherein the data access application operates without further development across database types, vendors and operating systems (col. 4, line 59-67 and col. 6, lines 30-35) to provide continuous transaction services while migrating a database (col.3, lines 41-43). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Savage with storing the retrieved data in at least one data object, each data object corresponding to a field of the database and wherein the data access application operates without further development across database types, vendors and operating systems to provide continuous transaction services while migrating a database (col.3, lines 41-43).

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As per claim 23 same as claim arguments above and Savage teaches:

storing the metadata in a structure object; converting the retrieved data to string objects and storing the string objects in the at least one data object; storing the structure object and the at least one data object in a database object; and transferring the database object to the server for transfer thereof to the client (col.21, lines 29-37).

As per claim 24 same as claim arguments above and Gupta teaches:

comprising a Java DataBase Connectivity (JDBC) interface for accessing the database and retrieving therefrom the metadata and at least a portion of the data stored therein (col.3, lines 64 to col. 4, line 2).

As per claim 25 Savage teaches:

providing a source database having data stored therein, the source database having metadata associated therewith identifying a structure and at least one field of the database (col.4, lined 55-60 and col.6, lines 38-50);

accessing the source database and retrieving the metadata and at least a portion of the data stored therein; storing the retrieved data in at least one data object, each data object corresponding to a field of the database from which the data stored in the data object was retrieved (col. 6, lines 38-50 and col.4, lines 55-64);

sending the metadata and the at least one data object to a client (col. 3, lines 1-15).

Savage does not explicitly teach the server operating on the source database across various database types, vendors and operating systems without requiring

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development effort; at a client: receiving the metadata and the at least one data object and generating a copy of the source database according to the metadata populating the copy of the source database with data retrieved from the at least one data object. Gupta does teach the server operating on the source database across various database types, vendors and operating systems without requiring development effort at a client: and receiving the metadata and the at least one data object and generating a copy of the source database according to the metadata populating the copy of the source database with data retrieved from the at least one data object (col.6, lines 20-27, 30-35 and col.4, lines 59-67) to provide continuous transaction services while migrating a database (col.3, lines 41-43). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Savage with the server operating on the source database across various database types, vendors and operating systems without requiring development effort; at a client: receiving the metadata and the at least one data object and generating a copy of the source database according to the metadata populating the copy of the source database with data retrieved from the at least one data object to provide continuous transaction services while migrating a database (col.3, lines 41-43).

As per claim 26 same as claim arguments above and Gupta teaches:

storing the metadata in a structure object; storing the structure object and the at least one data object in a database object; serializing the database object; and transferring the database object to the client (col.3, lines 64 to col. 4, line 2 and col.6, lines 20-27)

As per claim 27 same as claim arguments above and Gupta teaches:

comparing a size of the database object to a maximum size prior to the transfer thereof to the client; and if the size of the database object is greater than a maximum size, segmenting the database object and separately transferring each of the segments to the client (col.6, line 45-60).

As per claim 28 same as claim arguments above and Gupta teaches:

at the server: generating an auxiliary object for storing the segments of the database object exceeding the maximum size prior to the transfer thereof to the client (col.6, lines 45-60)

As per claim 29 same as claim arguments above and Savage teaches:

at the server: querying the source database for retrieving the metadata and the data stored therein (col.6, lines 15-17).

As per claim 30 same as claim arguments above and Savage teaches:

at the server: providing a programming interface for accessing and querying the source database (col.6, lines 15-17).

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As per claim 31 same as claim arguments above and Savage teaches:

at the server: validating a client for authorization to access the source database or a portion thereof prior to accessing the source database (col.22, lines 10-12).

As per claim 32 same as claim arguments above and Gupta teaches:

maintaining synchronization between the source database and the copy thereof residing on the client (col. 2, lines 34-47).

As per claim 33 same as claim arguments above and Gupta teaches:

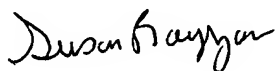
providing a Web based utility for client viewing and modifying the source database(col.3, line64 to col.4, line 2).

### Contact Information

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Rayyan whose telephone number is (571) 272-1675. The examiner can normally be reached M-F: 8am - 4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Susan Rayyan

June 25, 2006



JOHN R. COTTINGHAM  
PRIMARY EXAMINER